

micro-patterned array of chemicals]; wherein said fluid delivery system comprises a chamber that mates with the base, wherein the chamber comprises:

- Q2 cont. C1*
- (i) a plurality of domains matching the wells on the surface of the base, and
 - (ii) microfluidic channels that supply fluid to the domains.

Please add the following new claims:

Sub B27 9. The cassette of claim 1, wherein the domains are selected from the group consisting of etched domains and ~~raised reservoirs~~.

3 10. The cassette of claim 1, wherein the chamber further comprises microfluidic channels that remove excess fluid from the domains.

4b C2 11. The cassette of claim 1, wherein the microfluidic channels match the chamber's domains, to provide separate fluid flow to each domain, and wherein the domains are larger in diameter than the wells on the surface of the base. *112*

A35 12. The cassette of claim 1, further comprising a plug between the end of the microfluidic channel and the domains.

6 13. The cassette of claim 1 wherein a microfluidic channel extends from each domain to an edge of the chamber.

7 14. The cassette of claim 1 further comprising an array of cells on the wells.

8 15. The cassette of claim 1 wherein the wells in total comprise cell binding sites for more than one cell type.

9 16. The cassette of claim ⁸15 further comprising a controlled array of cell types on the wells, wherein the cell type on an individual well is dependent upon the cell binding specificity of the cell binding sites in the well.

Sub C4 17. A cassette for cell screening, comprising

a) a base having a surface, wherein the surface contains cell binding sites for interaction with different cell types, and wherein the cell binding sites comprise wells, wherein the wells in total comprise cell binding sites for more than one cell type; *removed*

b) a controlled array of cell types on the wells, wherein the cell type on an individual well is dependent upon the cell binding specificity of the cell binding sites in the well; and

c) a fluid delivery system for delivering a combinatorial of reagents to the controlled array of cell types; wherein said fluid delivery system comprises a chamber that mates with the base, wherein the chamber comprises:

- (i) a plurality of domains matching the wells on the surface of the base, and
- (ii) microfluidic channels that supply fluid to the domains.